



PCMO resistor trimmer

Inventor: Sheng Teng Hsu

Field of the invention

5 This invention relates in general to a circuit for resistor trimming, and more particularly, to a circuit for reversible precision adjustment or matching of thin film programmable resistors.

Background of the invention

10 Resistors play an important role in microelectronic circuits. A resistor is an electrical component designed to have an electrical resistance independent of the applied current or voltage. Two important issues in the fabrication of resistors in microelectronic processing are the accuracy of the individual resistor and the accuracy of the ratio of a pair of resistors.

15 Many microelectronic circuits, such as precision analog amplifiers, require the individual resistors to have a specific value to achieve the desired circuit performance level. Other circuits, such as differential amplifiers and analog-to-digital (ADC) or digital-to-analog (DAC) converter applications, require the accurate matching of two resistors, but do not require specific values for the resistors. "Matching resistors" means that the resistors have the same resistance value but may not be of any specific value due to manufacturing variations.